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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/774,620

02/09/2004

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05/08/2006

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EXAMINER

BROWN JR, NATHAN H

ART UNIT

PAPER NUMBER

2121

DATE MAILED: 05/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|---|-----------------------------------|--|
| Office Action Summary | Application No. 10/774,620 | Applicant(s) LIU ET AL. | |
| | Examiner Nathan H. Brown, Jr. | Art Unit 2121 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 10-20 is/are allowed.
- 6) ☒ Claim(s) 1,2,4 and 9 is/are rejected.
- 7) ☒ Claim(s) 3,5-8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 2/9/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Examiner's Detailed Office Action

1. This Office is responsive to application 10/774,620, filed February 9, 2004.
2. Claims 1-20 have been examined.

Objections to the Claims

3. Claim 4 is objected to because of the following informalities: In

Claim 4 "potion" should be -- portion --.

Claim 5 "method of claim 5" should reference some other method above claim 5.
Examiner assumes "method of claim 1".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1,2,4 are rejected under 35 U.S.C. 102(b) as being anticipated by *Wack et al.*, “NIST Special Publication X-X, Guide to Firewall Selection and Policy Recommendations”, 2001.

Regarding claim 1. *Wack et al.* teach a method of filtering data in a computer network (*see pp. 3-16, §2.1. General Introduction to Firewall Technology*); the method comprising: receiving data in a first computer (*see p. 6, §2.2. Packet Filter Firewalls, “Packet filter firewalls are essentially routing devices that include access control functionality for system addresses and communication sessions. The access control functionality of a packet filter firewall is governed by a set of directives collectively referred to as a rulebase.”, Examiner interprets a “packet filter firewall” to be a first computer and a packet to be data.*); scanning the data (*see p. 7, para. 3, “The packet filter, referred to as a boundary router, can block certain attacks, possibly filter unwanted protocols, perform simple access control,”, Examiner interprets filtering unwanted protocols to comprising scanning the packet header data.*) against at least a portion of a knowledge base (*see p. 9, Figure 2.5: Sample Packet Filter Firewall Rulebase, Examiner interprets a “rulebase” to be a knowledge base.*) in the first computer; forwarding the data to a second computer over a computer network (*see p. 7, “The packet filter, referred to as a boundary router, can block certain attacks, possibly filter unwanted protocols, perform simple access control, and then pass the traffic onto other firewalls that examine higher layers of the OSI stack.”, Examiner interprets “application-proxy gateway firewall” to be a second computer.*); and scanning the data against at least a portion of a knowledge base in the second computer, the portion of the knowledge base in the second computer including

information not present in the portion of the knowledge base in the first computer (*see* p. 13, “Each individual application-proxy, also referred to as a proxy agent, interfaces directly with the firewall access control rulebase to determine whether a given piece of network...traffic should be permitted to transit the firewall. In addition to the rulebase, each proxy agent has the ability to require authentication of each individual network user.”, *Examiner interprets “authentication” to comprise: User ID and Password, Hardware or Software Token, Source Address, and Biometric data; which is not present in the portion of the knowledge base in the first computer.*).

Regarding claim 2. *Wack et al.* teach the method of claim 1 wherein the knowledge base in the first computer is a subset of the knowledge base in the second computer (*see* p. 13, “Each individual application-proxy, also referred to as a proxy agent, interfaces directly with the firewall access control rulebase to determine whether a given piece of network...traffic should be permitted to transit the firewall.” *Examiner interprets the direct interface to the firewall access control rulebase to provide the application-proxy direct access to the entire access control rulebase. Since a set is its own subset, the firewall’s rulebase is a subset of the application-proxy’s rulebase.*).

Regarding claim 4. *Wack et al.* teach the method of claim 1 further comprising:
in the first computer, determining a designated destination computer of the data, and wherein the portion of the knowledge base in the first computer is selected based on a resource capacity of the destination computer (*see* p. 9, Figure 2.5: Sample Packet Filter Firewall Rulebase, “[Any| Any| 192.168.1.2| SMTP (25)| Allow| Allow External Users to send Email in]”, *Examiner interprets “Allow External Users to send Email in” to be a resource of 192.168.1.2.*).

Regarding claim 9. *Wack et al.* teach the method of claim 1 wherein the data comprise a file (*see* p. 10, “An organization could choose to restrict the types of traffic originating from within the organization, such as blocking all outbound FTP traffic.” *Examiner asserts that FTP traffic consists of FTP file data.*).

Allowable Subject Matter

6. Claims 3 and 5-8, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons For Allowance

7. The following is an examiner’s statement of reasons for allowance:

Claims 10-17 are allowed as the best reference, *Wack et al.*, teach a system comprising: a content filtering system in a first computer (*see* p. 14, §2.5 Dedicated Proxy Servers), but do not teach a system where: there is a content filtering agent in a second computer, the second computer being the destination computer of the of the incoming data; the content filtering system being configured to determine a destination computer of an incoming data and to scan the incoming data against a knowledge base in the first computer based on a resource capacity of the

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destination computer or the content filtering agent being configured to scan the incoming data against a knowledge base in the second computer based on an amount of scanning performed by the content filtering system on the incoming data in the first computer.

Claims 18-20 are allowed as the best reference, *Wack et al.*, teach a system comprising: A method of detecting viruses in an incoming data (*see* §2.5 Dedicated Proxy Servers, p. 15, “Virus scanning and removal”), the method comprising: comparing a content of an incoming data against a first set of virus patterns in a pattern file in a first computer serving as a gateway security node (*see* §2.5 Dedicated Proxy Servers, p. 15, para. 2, *Examiner interprets gateway security to comprise enforcing “user authentication requirements as well as other filtering and logging on any traffic”*); and forwarding the incoming data to a second computer (*see* p. 15, para. 1, “The proxy server would perform filtering or logging operations on the traffic and then forward it to internal systems (or another firewall).”). However, *Wack et al.*, do not teach a system comprising: comparing the content of the incoming data against a second set of virus patterns in a pattern file in a second computer, the second set of virus patterns including virus patterns that are different from that in the first set of virus patterns.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

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Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan H. Brown, Jr. whose telephone number is 571-272- 8632. The examiner can normally be reached on M-F 0830-1700. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on 571-272-3687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Anthony Knight
Supervisory Patent Examiner
Tech Center 2100

Nathan H. Brown, Jr.
May 3, 2006